Specifications

**Electrical Specifications @ 23°C unless otherwise noted**

- **DC Resistance (@20°C):**
  - 1.70 Ω ±20%, 1-2
  - 43.0 Ω ±20%, 3-4

- **Inductance:**
  - 35 µH ±20%, 100 kHz, 500mVac, 1-2, Ls
  - 1.38 mH ±25%, 100 kHz, 500mVac, 3-4, Ls

- **Leakage Inductance:**
  - 13 µH TYP., 100 kHz, 500mVac, 1-2 (tie 4-3), Ls

- **Dielectric Rating:**
  - 1500 Vac, 1 minute tested by applying 1500 Vac, 60 Hz for 1 second between terms 1-4

- **Turns Ratio:**
  - 1.0:8.0 ±1%, (1-2):(3-4)

- **V-µs Rating:**
  - 90 V-µs MAX., 1-2

- **Operating Temperature:**
  - -55 to +125°C

- **Thermal Shock:**
  - 10 cycles, -65 to +125°C

Specifications subject to change without notice.
Dimensions in inches [millimeters]. Tolerance +/-0.005" [0.13] mm

NASCENTechnology Manufacturing Inc., 1404 9th Ave SW, Watertown, SD 57201
www.nascentechology.com

FM-420 Rev B NASCENTechnology Proprietary Page 1 of 2
## 1. Environment Stress Screening

### Screening procedure

<table>
<thead>
<tr>
<th>Inspection/Test</th>
<th>Applicable Standard</th>
<th>Conditions</th>
<th>Pass Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inductance</td>
<td>MIL-PRF-21038, 4.7.3.2</td>
<td>100 kHz, 0.5 Vac, ( L_s )</td>
<td>28-43.8 ( \mu )H terms 1-2</td>
</tr>
<tr>
<td>Thermal shock</td>
<td>MIL-STD-202, method 107, condition B, except 10 cycles</td>
<td>( B = -65^\circ C ) to ( +125^\circ C ), 10 cycles, 15 min soak, 5 min transitions</td>
<td></td>
</tr>
<tr>
<td>Inductance</td>
<td>MIL-PRF-21038, 4.7.3.2</td>
<td>100 kHz, 0.5 Vac, ( L_s )</td>
<td>(&lt; 10% ) shift in inductance</td>
</tr>
<tr>
<td>Output voltage</td>
<td></td>
<td>At 25°C, ( V_{\text{supply}}=15 ) Vdc, ( I_{pk}=1.5A ), test circuit A</td>
<td>1400 Vdc MIN output</td>
</tr>
</tbody>
</table>

1) All units are serialized  
2) All units outside of specification are discarded from lot.

---

**Test circuit A**

![Test circuit diagram](image_url)